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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/580,766

03/22/2007

Andreas Dietzel

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EXAMINER

LEDYNH, BOT L

ART UNIT

PAPER NUMBER

2862

MAIL DATE

DELIVERY MODE

02/25/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<i>Office Action Summary</i>	Application No.	Applicant(s)	
	10/580,766	DIETZEL ET AL.	
	Examiner	Art Unit	
	Bot LeDinh	2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2008.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-31 is/are pending in the application.
- 4a) Of the above claim(s) 27-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/10/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election with traverse of Species I of Invention I in the reply filed on 12/09/08 is acknowledged. The traversal is on the ground(s) that the claims of Species I and Species II do not recite mutually exclusive elements. The Examiner agrees. Therefore, all claims 12-26 will be examined. With respect to Inventions I (claims 12-26) and II (claims 27-31), Applicant's election of Invention I (claims 12-26) is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

It is noted that in the restriction requirement dated 11/12/08, the Examiner failed to notice the fact that this application is a 371 national stage of a PCT application. Accordingly, to clarify the record, the Examiner makes a restriction requirement again as follows.

2. "Unity of Invention" requirement under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 12-26, drawn to a magnetic encoder system.

Group II, claim(s) 27-31, drawn to a method for fabricating a magnetic encoder disk.

3. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or

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corresponding special technical features for the following reasons. While group I recites a combination of MR sensor, a fixed suspension, an electronic board, an overcoat layer, etc. as its special technical features, group II recites “transferring the servo pattern” and activating the latent magnetic pattern as its special technical features. See also “Written Opinion of ISA” dated 8/10/08.

4. The Applicant may traverse this “Unity of Invention” requirement in the next response to the Office Action.

5. To the effect that there are two groups of inventions I and II, this Unity of Invention requirement is the same as the restriction requirement dated 11/12/08. The Applicant elected invention I; consequently, claims 12-26 are being examined.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 12-21, 24 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by either Baumgart et al (20050013040 A1) or Albrecht et al (6762909 B2). Either Baumgart et al or Albrecht et al discloses the same invention as claimed: A high-resolution magnetic encoder system comprising: a magnetic resistive sensor 106; and, a fixed suspension 110 to which the magnetic resistive sensor is mounted above a

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magnetic medium 102, wherein the sensor is adapted to perform a relative movement with respect to and in close contact to a surface of the magnetic medium 102; mechanism (108 or 112 or 114); DLC (Albrecht et al's col.3 lines 21-24). See Albrecht et al's Figs.1A-3, Baumgart et al's Figs.1-5.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 22-23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Baumgart et al (20050013040 A1) or Albrecht et al. Either Baumgart et al (20050013040 A1) or Albrecht et al discloses substantially the same invention as claimed, except for the MR sensor (or magnetic means) being a GMR or TMR sensor. It is well known in the magnetic sensor art that GMR sensors or TMR sensors possess very high sensitivity. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify either Baumgart et al (20050013040 A1) or Albrecht et al by employing a GMR or TMR sensor instead of a "general" MR sensor 106 in order to provide the encoder system with high sensitivity sensors for sensing magnetic fields.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims

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are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 12-14, 16, 21-23, and 25-26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2, 8-11 and 13 of U.S. Patent No. 7405556 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 2, 8-11-13 of U.S. Patent No. 7405556 B2 clearly anticipate claims 12-14, 16, 21-23, and 25-26 (e.g., for the read/write head, see claim 9 of the Patent; for GMR see claim 10; for TMR see claim 11). And "anticipation is epitome of obviousness."

12. Claims 12-14, 16, 21-23, and 25-26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3-6 of U.S. Patent No. 7355399 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 3-6 of U.S. Patent No. 7355399 B2 clearly anticipate claims 12-14, 16, 21-23, and 25-26 (e.g., for the read/write head, see claim 4 of the patent; for GMR or TMR, see claim 3). And "anticipation is epitome of obviousness."

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13. Claims 12-14, 16, 21-23, and 25-26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3-6 of U.S.

Patent No. 7208948 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 3-6 of U.S. Patent No. 7208948 B2 clearly anticipate claims 12-14, 16, 21-23, and 25-26 (e.g., for the read/write head, see claim 4 of the patent; for GMR or TMR, see claim 3). And "anticipation is epitome of obviousness."

14. Claims 12-14, 16, 21-23, and 25-26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3-6 of U.S.

Patent No. 7141965 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 12-14, 24-25 and 29 of U.S. Patent No. 7141965 B2 clearly anticipate claims 12-14, 16, 21-23, and 25-26 (e.g., for the read/write head, see claims 14 and 25 of the patent; for GMR or TMR, see claims 12-13, 24 and 29). And "anticipation is epitome of obviousness."

15. Although specific columns, figures, reference numerals, lines of the reference(s), etc. have been referred to, Applicant should consider the entire applied prior art reference(s).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Bot LeDinh whose telephone number is 5712722231. The Examiner normally does not work on Fridays. The examiner can normally be reached on Maxiflex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PATRICK J. ASSOUAD can be reached on (571)272-2210. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BL/ 2009

/Bot LeDynch/
Bot LeDynch
Primary Examiner, Art Unit 2862

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